

APPENDIX B:

Standard Management Practices

These management practices constitute a portion of each alternative considered. They are the result of existing laws, regulations, and previous planning efforts and will not be changed by any of the alternatives described in this chapter. These standard management practices (SMP), as applicable will be appended to all future APDs within the EIS area.

Air Quality

- A-1 Operators, as required by regulation (43 CFR 3612.5-1) shall prepare and incorporate measures in a Public Protection Plan to avoid and minimize risk to the general public, project employees, property and the environment.

Paleontological Resources

- P-1 If a paleontological site is discovered during construction work, all work will stop and the Authorized Officer (AO) will be notified immediately. The Authorized Officer will evaluate the findings, determine appropriate mitigation, and notify the operator of his actions within 48 hours.

Cultural Resources

- C-1 Because of the presence of potentially significant cultural resources in the EIS area (See Chapter 3, Page 44), all surface disturbing activities, including but not limited to well-pad construction, construction of tank batteries, road and pipeline construction, and powerline construction, will require that a BLM standard Class III cultural resource inventory (intensive inventory) be performed before surface disturbance is authorized. Such inventory will be done by the Government within its normal scheduling and budget constraints, or can be done by the Operator by engaging a cultural resource professional acceptable to the Government. Refer to BLM Manual Supplement, Montana State Office, 8143.
- C-2 Where cultural resources are found to be in conflict with oil and gas development, avoidance of the resource will be the primary mitigating measure utilized, if feasible. Where cultural resources cannot be avoided, such resources must be evaluated for eligibility to the National Register of Historic Places, and if appropriate, consideration of methods to reduce or avoid adverse effect must be made, in consultation with the State Historic Preservation Officer and Advisory Council on Historic Preservation, as required by Section 106 of the National Historic Preservation Act and its regulations at Title 36, Code of Federal Regulations, Part 800.
- C-3 If a cultural resource is discovered during operations, all operations that would result in destruction of the resource shall be avoided, and the AO notified. Disturbance of such resources is not allowed until directed by the AO.

Soil Resources

- S-1 All drill pads will be designed and constructed to disturb the smallest practical area. All precautions necessary to stabilize structures will be taken during construction. Qualified supervision will be provided during the installation of all erosion control structures including the construction of berms, dikes, trenches, and the outslope fill.
- S-2 At all sites removal and storage of subsoil and topsoil will be according to approved engineering designs submitted with the APD. Care will be taken not to mix subsoil with topsoil. Erosion will be controlled on subsoil stockpiles through appropriate construction design with mulching and/or revegetation. Whenever possible, topsoil will not be stored for extended periods (over two years) and will be used for immediate reclamation.
- S-3 All disturbed areas not required for use during drilling operations will be stabilized and revegetated immediately following construction to minimize erosion of soil.
- S-4 Topsoil removed from the site will be protected to maintain its viability over the life of the project by applying it to the areas of disturbance outside the working area. These areas would be reseeded according to the reclamation plan. At abandonment, necessary topsoil would then be available from these areas.
- S-5 Land grading and clearing will be done only on the minimum area required for construction. Existing or constructed roads will be used for vehicle travel; no off-road use of vehicles or equipment will be allowed without the approval of the A0.
- S-6 Use best management practices and design construction to avoid increased stream sedimentation.
- S-7 Use special design measures, determined at pre-drill inspection, for new cut and fill slopes where moderate to high water erosion hazards exist.
- S-8 Where possible, avoid construction activities on slopes greater than 60%, and avoid well pad construction on slopes greater than 40%.
- S-9 Obliteration of well pads and access roads will include removal of drainage structures and associated fill dirt to the extent necessary to pass expected flood flow.
- S-10 Use best management practices and design construction as outlined in the Surface Operating Standards For Oil and Gas Exploration and Development (commonly referred to as the Gold Book).

Vegetation Resources

SMPs S-1, S-2, S-3, S-4, S-10 also apply to this resource.

- VR-1 Operators will be responsible for designing and implementing a noxious

plant control program.

- VR-2 All new well field pipelines and transmission lines will be required to use common rights-of-way when economically and technically feasible.
- VR-3 All areas not needed for production on the well pads will be recontoured and rehabilitated following the drilling phase for each well. The determination on necessary area for operation will be made by the AO in consultation with the operator.
- VR-4 The operator shall, at all times during construction, maintenance, and operation, maintain satisfactory spark arrestors on all steam and internal combustion engines and on all flues.
- VR-5 Preclearing of mountain brush and tree-covered areas prior to dozer and maintenance blade work will be required. Preclearing will involve hand cutting brush and trees and removing them to designated areas.

Livestock

- L-1 Pipelines will generally be constructed after September 5 to lessen impacts to livestock.
- L-2 Pipeline trenches will be covered as soon as possible. If pipeline trenches are to be left open for an extended period of time, they will be temporarily fenced as determined by the AO.
- L-3 The reserve pit will be fenced (three stands of barb wire, 48 inches high) to keep out livestock and wildlife. Fencing will remain in place until a final disposition of drilling fluids, muds, and cuttings is approved by the AO.
- L-4 Disturbance of range improvements such as fences, roads, and watering facilities during the construction and maintenance of roads and pipelines must be kept to an absolute minimum. Immediate restoration of any damage to improvements to at least their former state will be required. Functional use of these improvements must be maintained at all times. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting the fence. A gate or cattle guard acceptable to the AO shall be installed in the gate opening and kept closed when not in actual use. Where a permanent road is to be constructed or maintained, cattle guards shall be placed at all fence crossings.
- L-5 If a natural barrier used for livestock control is broken during construction, the operator will adequately fence the area to prevent drift of livestock. All fencing constructed by the operator will meet BLM and FS design requirements with input from the Montana Department of Fish, Wildlife and Parks (MDFWP). Fence specifications will be determined on case-by-case basis.

Wildlife Resources

SMPs S-3, S-5, S-6, VR-1, VR-2, VR-3, L-3 and L-4 also apply to this resource.

- WF-1 Any facilities (wellsites, roads, pipelines constructed within the Blackleaf Wildlife Management Area (WMA) will be done in accordance with seasonal and other restrictions as determined by the MDFW&P.
- WF-2 Staging areas for stream crossing equipment will be located outside of the riparian zone to reduce the possibility of silt entering into streams and to reduce disturbance to vegetation in the riparian zone. A maximum construction of 25 feet will be used in riparian areas. Variances to this must be approved by the AO.
- WF-3 The operator will avoid human activities in grizzly bear habitat components which provide important food sources during spring and early summer, April 1 - July 15. These habitat components include riparian shrub types, Populus stands, wet meadows, sidehill parks and avalanche chutes. Maintain an undisturbed zone of at least 1/2-mile between activities and the edge of these habitat components.
- WF-4 No drilling activities will occur within 1-mile of grizzly bear den sites from October 15 to April 15.
- WF-5 In grizzly bear habitat, no more than two wells will be drilled concurrently. These concurrent wells must be separated by at least a major drainage in critical areas or a minimum one mile distance, at the agencies discretion, based upon the site specific location, resources and topography.
- WF-6 A July 15 - December 15 time period will be used to select a 105-day drilling window for any activity located in the areas cross-hatched on Figure 2.11 of the draft EIS. Those areas on the eastern side of the study area, not cross hatched, would generally be available for year-round drilling activity unless new information reveal effects of the action may impact listed species or critical habitat in a manner or to an extent not considered in this document.
- WF-7 Access roads for producing wells will be closed and locked to motorized use by the public. Access roads for non-producing wells will be rehabilitated unless otherwise approved by the AO.
- WF-8 No firearms will be allowed on locations or in company or subcontractor vehicles. No dogs will be allowed on locations.
- WF-9 Garbage will be incinerated daily or stored in bear proof containers and removed to local landfills on a daily basis.
- WF-10 No off-duty work camps will be located within occupied grizzly bear seasonally important constituent elements. Crews will be bussed to/from drill sites to reduce activity levels on roads.
- WF-11 Roads and drill sites will be located, as much as possible, to avoid important wildlife habitat components based on a site specific evaluation.
- WF-12 Where deemed appropriate by the AO, wildlife forage and/or cover species will be used when rehabilitating drill sites and pipelines.

- WF-13 Human disturbances will be minimized at raptor nesting territories during sensitive nesting phases.
- WF-14 One central gas processing facility will be used to remotely monitor wellheads, reducing the amount of vehicle traffic in the EIS area. Production facilities will be located off site at this central processing facility; any change in this policy will require approval by the AO after further consultation with the USFWS.

Surface Water Resources

SMPs S-1, S-3, S-5, S-6, S-7, S-10, VR-3 and WF-2 also apply to this resource.

- SW-1 Where possible, all construction activities will be located outside of any floodplains. Where this is not practicable, construction that could be damaged by flood water or that could impact water quality will be placed above or flood proofed to above the 100-year flood water surface elevation to protect the water and floodplain. Pipelines constructed across floodplains of small drainageways and streams will be buried below the scour line of the beds of drainageways and streams, to prevent exposure due to streambed erosion during periods of high flood flows.
- SW-2 Excavated material will be located away from free-flowing streams and outside floodplains. Placement of dredged or fill material into a waterbody or wetland area, while not presently contemplated, would require a permit under Section 404 of the Clean Water Act. Any construction involving a stream channel will require the filing of a FG-124, Notice of Construction of Hydraulic Project Affecting Fishing Waters, with the Montana Department of Fish, Wildlife and Parks.
- SW-3 All phases of a project, including road and drill site construction, maintenance and rehabilitation, shall be guided by the Clean Water Act. All hazardous substances, including fuels, shall be controlled so as to prevent their accidental discharge into waterways.
- SW-4 Roadway construction will comply with flood plain management criteria of Teton County and the State of Montana and that the 100-year flood water surface elevation of any stream, if affected, is not increased more than one foot, relative to pre-project conditions.
- SW-5 All actions will comply with the Montana Water Quality Act (MCA 75-5-101 ET.SEQ.) including the non-degradation policy.

Groundwater Resources

- GW-1 Pit liners will be used to prevent groundwater contamination.
- GW-2 Freshwater aquifers will be cased and cemented to minimize migration of

fluids and prevent contamination.

GW-3 All abandoned wells will be plugged in accordance with applicable State and Federal Regulations.

Health and Safety

HS-1 A Public Protection Plan (H2S Contingency Plan) will be required for all drillsites.

HS-2 Operator will follow all APD practices for conducting drilling operations wherever H2S may be encountered.

HS-3 During times when drilling may encounter H2S, wellsites will be signed and the proper personnel notified to reduce the likelihood of persons being exposed to potentially dangerous situations.

Recreation Resources

SMPs S-5, VR-3, WF-1 and WF-7 also apply to this resource.

R-1 Disturbance of recreational facilities and improvements such as signs, outhouses, stock ramps, etc., during field development must be kept to an absolute minimum. Immediate restoration of any damage to improvements to at least their former state will be required.

Visual Resources

SMPs S-1, S-3, S-5, S-8, VR-2 and VR-3 also apply to this resource.

V-1 All permanent structures (on site longer than 90 days) will be painted a flat, non-reflective earth tone color to blend with the surrounding landscape. Exceptions to this requirement would be determined on a case-by-case basis by the A0 because of varying levels of sensitivity, or structures which require safety coloration in accordance with Occupational Safety and Health Administration requirements. Color selection will be approved by the A0.

V-2 Where possible, drill sites and associated activities will take place in areas of low relief.

V-3 The generation of fugitive dust is likely. Should an air quality, visuals, soil loss or safety problem be identified (by the A0), abatement procedures will be initiated. Water will be used on roads; any additives must be approved by the A0.

V-4 When rehabilitating disturbed areas, slopes will be rounded and wrapped to resemble natural surroundings.

V-5 Within 30 days after conclusion of construction, operation, or maintenance activities, construction materials related litter and debris shall be disposed of in accordance with instructions from the A0.

Noise

- N-1 All drill rigs and other associated equipment will utilize a muffler system capable of an average 30 dBA spectrum reduction.

Transportation System

SMPs S-5, S-6, S-8, S-9, L-4, WF-1, WF-3, WF-7, WF-11, WF-15 and V-3 also apply to this resource.

- TS-1 Existing arterial and collector routes will remain open to public use to maintain existing access to public lands.
- TS-2 Seasonal road closures for wildlife and/or other resource protection will remain as currently managed.
- TS-3 Operators will not exceed a maximum cutbank height of 6 feet unless slope stability test are conducted at each specific site and justify greater heights.
- TS-4 The operator will be responsible for preventive and corrective road maintenance throughout the life of the field. This may include, but not be limited to, blading roadway, cleaning ditches and drainage facilities, or other requirements as directed by the AO.